

Amendments to the Specification:

Please replace the paragraph beginning at page 15, line 10, with the following amended paragraph:

When the door 402 is closed (or if the door 402 was already closed), the process continues by moving a movable member against at least one of the door 402 and the front plate assembly 408, in block 478. In exemplary embodiments of the invention, the movable member includes an inflatable bladder that is situated in the door 402 and, when inflated (represented by arrow 797 in FIG. 3G), pushes against an installed pump cassette and the front plate assembly 408 so as to produce a net outward force on the door 402 outward away from the front plate assembly 408 (represented by arrow 798 in FIG. 3G). The movable member causes the surfaces 222 and 224 to be forced toward one another. With the latch member 703 so engaged, the surface 221 prevents the latch member 703 from being rotated or otherwise displaced downward due to contact with the surface 223 and therefore prevents disengagement the latch member 703 from the latching structure 220. Opening of the door 402 by accidental or inappropriate manipulation of the handle 742 is thus prevented. The system described above may be used in a wide variety of applications. In exemplary embodiments of the present invention, an anti-pathogen solution can be mixed with a red blood cell concentrate (RBCC) to form an incubation solution for reducing pathogens in the RBCC. The anti-pathogen solution is prepared by mixing a caustic anti-pathogen compound (e.g., PEN110(TM) or INACTINE(TM), which is an organic solvent with a pH over 11 that is distributed by V.I. Technologies, Inc. of Watertown, Massachusetts) with a buffer solution of sodium phosphate to a predetermined concentration (e.g., 1 part anti-pathogen compound to 99 parts buffer solution), preferably as described in Application D70. For convenience, this mixing of anti-pathogen compound with buffer solution may be referred to hereinafter as "compounding," and an apparatus that performs such compounding may be referred to hereinafter as a "compounder" or "compounder pump." The incubation solution is prepared by mixing the anti-pathogen solution with the RBCC to a predetermined concentration (e.g., 1 part anti-pathogen solution to 9 parts RBCC), as described below.

For convenience, this mixing of anti-pathogen solution with RBCC may be referred to hereinafter as “blood processing,” and an apparatus that performs such blood processing may be referred to hereinafter as a “blood pump.” Due to the caustic nature of the anti-pathogen compound, the system remains must remain in a closed environment to prevent the operator from being harmed during compounding /blood processing. Details of a blood processing system incorporating the illustrative door locking system follow below.